

REMARKS

Claims 1-18 are pending in the application. Claims 1-18 were rejected under 35 U.S.C. §102(b), as described in paragraph 2 of the Office Action. Claims 1 and 8 are the only independent claims.

The specification has been amended to place the application in better U.S. form.

Attached hereto are replacement formal drawings for figures 1 and 2. In particular, a pointing line for item "2s8" has been added in Fig. 1. Further, "and d SW2 to f" in item S211 of Fig. 2 has been changed to --and SW2 to d--, to correspond with the description on page 22, line 21 of the Specification.

Item 13 of the Office Action summary dated August 13, 2003 indicates that none of the certified copies of the priority documents have been received. Applicants respectfully submit that the Notice of Acceptance of Application under 35 U.S.C. § 371 and 37 C.F.R. § 1.494 or 1.495 dated November 24, 1999 indicates that the priority document has been received by the USPTO. Accordingly, it is respectfully requested that the Examiner acknowledge receipt of the certified copy of the priority document.

The present invention relates to simplification of a circuit structure of an apparatus which reproduces a digital code sequence in which audio, video and other additional information that are multiplexed, such as a video CD, a DVD and a digital CS broadcasting.

In some conventional systems, when a packet boundary is recognized, a complicated address control is performed whereby a read pointer is returned to a position before the packet boundary. This required address control increases the amount of hardware of the circuitry.

In accordance with the present invention, data which should be normally transferred to a decoding buffer (i.e., data which has read in the past) is output from a data format means to the decoding buffer according to the matching status of the code sequence indicating the packet boundary. Therefore, it is not necessary to perform the complicated address control of returning a read pointer to a position before the packet boundary when the packet boundary is recognized, as conventionally practiced. Accordingly, the present invention reduces the hardware scale of the coded signal reproduction apparatus.

In accordance with the present invention, matching status information is used for outputting predetermined data. More specifically, as opposed to conventionally moving a read pointer to a position before the packet boundary, the present invention detects the matching status of a code with a prefix code of a packet start code and outputs the matching status information. This matching status information is used by data format means to output the predetermined data.

Independent claim 1 is drawn to a coded signal reproduction apparatus comprising, *inter alia*, matching status information output means and data format means. More specifically, the matching status information output means of claim 1 is required to be operable to detect the “matching status of a code which is input for every predetermined bit with a prefix code of a packet start code,” and to output “**matching status information of a head part of the packet start code.**” Further, the data format means of claim 1 is required to be operable to output, “**predetermined data in accordance with the matching status information.**”

It is respectfully submitted that Boden fails to teach or suggest the above identified limitations.

In the invention described in Boden, in order to realize a decoder which automatically adjusts to coded video signals of various formats, data are divided into blocks, a start code is added at the head of each block while a stop code is added at the end of each block, and a system data and a system control signal are added after the start code. The system data includes parameters and commands which are required by the receiver decoder so as to adjust to the settings of the transmitter encoder, and the system control signal indicates a location storing the system data which are stored in the memory of the receiver decoder.

In light of the above discussion, it is clear that Boden fails to teach: matching status information of a head part of a packet start code.

Independent claim 8 is drawn to a coded signal reproduction apparatus comprising, *inter alia*, end code sequence detection means and formatter means. More specifically, the end code sequence detection means of claim 8 is required to be operable to detect, “from code sequences of coded data, a code sequence indicating the end of the coded data.” Further, the formatter means of claims 8 is required to be operable to, “**add a predetermined number of pseudo data** to the rear of the code sequence indicating the end of the coded data so that the data bus width of pipeline transfer including

the end of the coded data **becomes equal to the bus width of pipeline transfer including other data**, when a code sequence indicating the end of the code data is detected by the end code sequence detection means.”

It is respectfully submitted that Boden fails to teach or suggest the above-identified limitations.

As discussed in column 7, lines 65-67, Boden teaches padding video data “with binary ones **if the length is an uneven multiple prior to serial transmission**.”

Accordingly, Boden fails to teach adding a predetermined number of pseudo data such that the data bus width of pipeline transfer including the end of the coded data becomes equal to a bus width of pipeline transfer including other data.

In light of the above discussion, it is clear that Boden fails to teach a formatter means operable to add a predetermined number of pseudo data to the rear of a code sequence indicated the end of the coded data so that the data bus width of pipeline transfer including the end of the coded data becomes equal to the bus width of pipeline transfer including other data, when the code sequence indicating the end of code data is detected by an end code sequence detection means.

Accordingly, Boden fails to teach: a matching status information output means operable to output matching status information of a head part of a packet start code or a data format means operable to output predetermined data in accordance with the matching status information, as required in independent claim 1; and a formatter means operable to add a predetermined number of pseudo data to the rear of a code sequence indicating the end of the coded data so that the data bus width of pipeline transfer including the end of the coded data becomes equal to a bus width of pipeline transfer including other data, when a code sequence indicating the end of the code data is detected by the end code sequence detection means, as required in independent claim 8.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a prior art reference, *Akzo N.V. v. U.S. Int’l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the foregoing, it is clear that Boden does not anticipate claims 1 and 8.

Because: claims 2-7 and 10-17 are dependent upon claim 1, and therefore include all the limitations thereof; and because claims 9 and 18 are dependent upon claim 8, and therefore include

all the limitations thereof, it is respectfully submitted that claims 2-7, and 9-18 are additionally patentable over Boden within the meaning of 35 U.S.C. § 102.


Furthermore, it is respectfully submitted that there is no motivation to modify the teachings of Boden to arrive at the present invention within the meaning of 35 U.S.C. § 103. Accordingly, it is respectfully submitted that claims 1-18 are patentable over Boden within the meaning of 35 U.S.C. § 103.

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

Respectfully submitted,

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January 13, 2004